Claims

1. Computer system for managing composite documents in multi-user mode, including:

- a document data processing tool,

- a document data display manager,

5   - a document user rights manager, characterized in that:

- the processing tool includes:

* an object model, including a plurality of classes, structured to include a content pointer, a level indicator, an access method, a validation method, and a validation indicator,

* a document operator capable of creating and maintaining a document in the form of a

10   set of object model class instances,

- the display manager being arranged to enable the joint display of a tree diagram, defined according to level indicators and display/input zones with tabs, corresponding to the contents of class instances existing in at least part of the tree diagram,

- the processing tool only authorizing access to a document according to the access rights

15   of the user concerned, such as determined by the document user rights manager,

- in the event of access, the processing tool only authorizing validation of a zone according to the validation rights of the user concerned for the document, as determined by the document user rights manager,

- the display manager additionally including a first mechanism capable of jointly

20   modifying the display of a zone and a corresponding node in the tree diagram according to the validation status of the zone, and a second mechanism capable, judging by the level indicators, of causing a validated status to rise to a higher level node when all of the nodes of one level are validated,

- whereas, when the head of the tree diagram is validated, the processing tool authorizes

25   the signature of the entire document by a user having corresponding signature rights.

2. Computer system according to Claim 1, characterized in that the tree diagram includes levels arranged in a descending hierarchy, in particular levels such as document, chapter and section, each level comprising one or more nodes.

3. Computer system according to one of Claims 1 and 2, characterized in that a tabbed

30   display/input zone corresponds to a node at a level.

4. Computer system according to one of Claims 1 to 3, characterized in that the document user rights manager determines the user rights for a given document based on the instantiation of a method of reading the rights of that user.

5. Computer system according to one of Claims 1 to 4, characterized in that the user rights for a document include at least some of the following rights: the right to display, print, search, preview, create, duplicate, link, delete, export, write, validate, discuss, publish, enter, and sign a document.

6. Computer system according to one of Claims 1 to 5, characterized in that the document user rights manager determines the user role data for a given document based on the instantiation of a method of reading the role of that user, the role data being defined by a set of rights.

7. Computer system according to one of Claims 1 to 6, characterized in that the user role data for a document includes at least some of the roles such as

- reader, defining at least the rights to display, print, search, preview, and export a document for a user,

- author, defining at least the rights to create, duplicate, delete, and revise a document for a user,

- editor, defining at least the rights to write, validate, and discuss a document for a user,

- publisher, defining at least the right to publish a document for a user,

- contributor, defining at least the rights to validate and discuss a document for a user,

- signatory, defining at least the right to sign a document for a user.

8. Computer system according to one of Claims 1 to 7, characterized in that

- the first mechanism is capable of changing the node color according to the validation status of the corresponding zone,

- the second mechanism is capable, when the color of all the nodes at a level indicates that they are validated, of changing the node color of the higher level to indicate validation thereof.

9. Computer system according to one of Claims 1 to 8, characterized in that the document user rights manager is designed to manage rights defined for a group of documents and/or for a set of users.

10. Computer system according to one of Claims 1 to 9, characterized in that the display manager includes a third mechanism capable, based on the validation of a higher node, of propagating the node validation to lower levels.